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ABSTRACT

Motion media refers to film, television, and other forms of kinesthetic media including computerized multimedia technologies and virtual reality. Imagery reproduced by motion media carries a multisensory amalgamation of mental experiences. The blending of these experiences phenomenologically intersects with the reality and perception of words, images, sounds, numerical data, and artistic expression. Aural, verbal, visual, and kinesthetic (A-V-V-K) imagery produces, in a recall mode, images that become symbolic and sign-bearing. Virtual reality, interactive computerized multimedia, and other forms of media technology stretch our minds' ability to perceive and interpret A-V-V-K imagery. The many literacies of this imagery may bring another challenge. In the future, other sensory forms (smell, touch, and taste) may be incorporated into communications, which will bring us closer to an age of total media and total imagery. (Contains 14 references.) (SLD)

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Aural-Visual-Kinesthetic Imagery in Motion Media

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by
David W. Allan

Introduction

There are some interesting characteristics in the nature of film and television and the imagery they convey. The author identifies four kinds of imagery commonly found in motion media, namely, aural, verbal, visual, and kinesthetic imagery (A-V-V-K imagery). This discussion includes the role of imagery in film and television, the human mind and mental models, and symbolism in motion media.

Motion Media, inclusively, refers to film, television, and other forms of kinethetic media including computerized multi-media technologies and virtual reality. Imagery in motion media, in this context, is more than mental and emotional processes. It is a semiotic system that influences the aesthetic nature, expression, and interpretation of kinesthetic media.

The Nature of A-V-V-K Imagery

Definition

The nature of imagery, like perception and other mental processes, builds upon certain phenomenological attitudes or positions like nature, purpose, function, flow, relationships, time, and space. Imagery is what we think we can perceive; they are mental representations, symbolic thoughts, and conceptualizations of experiences in life. One of our most common experiences is with media, especially motion media. What is the imagery in motion media like?

Properties

Aural-verbal-visual-kinesthetic or A-V-V-K imagery, in my view, is—historically—the primary forms of imagery in media. How does A-V-V-K imagery work and what are its properties? A-V-V-K imagery in motion media initiates and guides human thought by delineating and deciphering the code and language of the media it enhances. Message content and meaning in motion media and the emotions it produces are influenced by an individual's scholastic, cognitive, emotional and ideological history. The continuous development of a self-perceptual history instantly reframes the smallest detail in A-V-V-K imagery—thus building a personal repertoire of imagery (Allan, 1991).

How are personal repertoires of imagery constructed? Edmund Bolles (1988) said the symbolic essence of imagery reappears in the forefront of human memory, instantaneously and without effort. When triggered by other related or associated representations in life, imagery, in all its forms and all its degrees, reaches emotional, factual, and

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interpretive levels.

The coded imagery of language symbolically represents meaning in life, culture, and society. In the rhetorical structure of language and dialog—and against the textual fabric of aural, visual and kinesthetic activity—much-sought-after mental imagery is conveyed. Content, story, and plot, through the magic of motion media, seek to satisfy the emotional and communication needs of individuals and groups.

A-V-V-K Imagery

Aural imagery should be looked at first. Aural information comes to the individual in the form of sounds, music, and spoken words. Aural imagery, generated and expressed, is a merging of non-verbal sounds and articulated vocal expression. Sound effects, created and performed in a recognizable form, communicate to the audience dramatic effects, aural coloring, and emotional feeling. The linkage of silent space, volume, and timing—where appropriate—produces an audio and visual sensation of combined energies.

Next, then, is verbal imagery. The heart of our rhetoric, the spoken and written word, comes from our language, English. Words, as codes, identify and label people, places, ideas, feelings, and things. In these codes, words and word combinations in sentences strike and form verbal imagery, developing a feeling or expressed emotion in the language of our culture.

Visual imagery, like aural imagery, exceeds its own capacity of meaning. We see visual imagery everywhere—during each hour we are awake. Our eyes have an enormous capability to see and transmit sophisticated images to the brain. The dominant sensory form in motion media is the visual because of its enormous capacity to hold and display information, and because of its many nuances and intricacies.

Motion media is more than the sum of its individual A-V-V-K imagery forms: there is a global unfolding of many phenomena within the viewer-recipient. Communication theorists Wilbur Schramm and de Solo Pool (1973) maintained that "The process of manipulating images and attempting to derive meaning from the interrelationship of images and sounds is basic to the nature of the medium" (p. 560). Movement of characters and physical objects and the images and messages they make within the medium intersect to form a union of aural, verbal, visual, and kinesthetic imagery. Some forty-five years ago the great Russian filmmaker, Sergei Eisenstein, understood that the development of an image or a film scene by the producer-director was not all there was to filmmaking. Eisenstein (1947) said, in his book *The Film Sense* , ". . . the image of a scene, as sequence, of a whole creation, exists not as something fixed and ready-made. It has to arise, to unfold before the senses of the spectator" (p.91).

Consequently, as a result of the mix of A-V-V-K imagery, different phenomena take place. The development of a personal repertoire of imagery begins at an early age as a viewer-recipient of motion media information. Filmic development and the ability of the viewer-recipient to internalize such sensory experience, causes a *synthesis* of imagery to emerge—immature at first, but more sophisticated as we grow older Allan (1991).

There is another phenomena that occurs when imagery is used in media. A *synesthesia* occurs when a sound or a musical passage causes us to visualize a scene or a particular personality characteristic. For example, the crackling noise of an exploding, roaring forest fire; the gentle, delicate smile of a beautiful-handsome person. The synthesis of imagery and the iconicity of image events cause a series of mental acts to occur. Ideas (abstract or concrete), thought pat-

terns, sensory experiences, spatial, and temporal activities all lend themselves to mental model configurations (Allan, 1991).

Motion media present factual, well-paced, voluminous amounts of A-V-V-K imagery for the mind to process, to store, and, later, to recall. Not all gets through, however, at least not consciously. Noise and external forces may cancel even the slightest level of meaningfulness in the image event or in the informational increment. Redundancy and repetition of similar imagery and memory events help to reinforce and reinstate memory of the sensory experience.

A-V-V-K imagery, the real substance of media and the communication process, holistically becomes a *meta-phenomena*, a phenomena within phenomena. The orchestration of A-V-V-K imagery produces its own kinesis and symbiosis. In the whirlwind of the phenomena of communication, the mix of A-V-V-K imagery and the memories that follow their reception and perception, merge with other communication phenomena to disperse themselves in various serial, parallel, or scattered patterns. The internal mix of one phenomena within another is called meta-phenomenology (Allan, 1991).

The Human Mind - Mental Models

The human mind is something more than a mechanism that merely processes sensory experiences and mental imagery. Consciously and sub-consciously, the mind is an active participant before, during, and after the viewing experience. The kinesthesis of human mental behavior is unending. In and of itself the human mind is heuristic in form.

In John C. Yuille's (1983) book, Imagery, Memory and Cognition—Essays in Honor of Allan Paivio, psychologist Albert N. Katz recognizes Paivio for his contribution to visual imagery and the mind. Katz said Paivio comes as close as any theorist to a fresh understanding on how imagery and the mind works. Allan Paivio (1971) suggested that the mind follows three mental imagery operations, encounter, mediation, and instruction. By this he means that the mind instructs itself in deciding the importance of various images and their meanings.

A pioneer in cognitive psychology, mental imagery, and film theory, Allan Paivio (1975) referred to mental instruction as a mediational process, whereby encoded imagery serves to influence. In this cognitive operation, Ian Begg (1983) speaks of traces, trace use, and trace contacts as basic structural units of the memory process. The author calls these memory units iconic memory units, or IMU's. Other researchers label them as "thought-messages" and "word-images".

Psychologist Philip N. Johnson-Laird (1983) stated that mental models are *"recursive mental processes* that enable human beings to understand discourse, to form mental models of the real and the imaginary, and to reason by manipulating such models" (p. xi).

The medium does affect the message. Jerome W. Bruner et al. said a person's "ability to think develops with the tools and media he/she uses and that the mind models these media" (1966, p. 56). Bruner's "implement" analogy labels media and its imagery as tools which do something to something else by enacting stimulation and causing a reaction or response from another human being. Each medium harbors its own characteristics, strengths, and weaknesses. Each is unique, Bruner explained.

Psychologist Johnson-Laird (1983) uses models to explain time, space, and motion. He also uses two other types of mental models. They include the meta-linguistic and the set-theoretic models. Essentially, linguistic expression and the use of mental

tokens for connecting various elements and constructions summarize the "meta-linguistic" model. By abstracting semantic relationships of a language, the mind uses the symbolism and codes of a language to build one mental model within another, one language within another, thus the expression: meta-linguistic. Sets of numbers, expressed in mathematical form and mentally perceived, best describe the set-theoretic model.

Symbolic Theory, Signs and Symbols

Suzanne Langer (1957), humanistic philosopher of art and a leader in the fields of visualization and imagery, offers the following:

> But between the facts run the threads of unrecorded reality, momentarily recognized, wherever they come to the surface . . . the bright, twisted threads of symbolic envisagement, imagination, thought-memory and reconstructed memory, belief beyond experience, dream, make-believe, hypothesis, philosophy—the whole creative process of ideation, metaphor, and abstraction that makes human life an adventure in understanding (pp. 236-237).

Langer's (1957) symbolic theory of the mind breaks away from the boundaries of scientific deduction and inductive reasoning. She offers a world of metaphors, statements of meaning, signs and their abstract meaning, and symbolism. A-V-V-K imagery is closely associated with holistic, symbolic, and semiotic thinking. Her views parallel this author's symbolic-iconic theory of how imagery and motion media are perceived.

A universe of information and knowledge exists along a symbolic continuum, states William Winn, as "arbitrary symbols (e.g. words) at one end and realistic symbols (e.g., pictures) at the other end," (1982, p. 5). David Jonassen (1984) said that signs and icons serve "as a substitute for real experiences," and through iconic or other mediated events resemble the event or an object. He said signs and icons compress "reality to convey the ideas" and the meaning carried by those ideas (p. 161).

Signs and symbols serve two functions, stated educator Gavriel Salomon (1979), "as vehicles for communication and as vehicles for thought" (p. 116). Salomon called this an isomorphism, the mix "between communicational and mental coding elements" (p. 116).

Iconic Memory Units

In the concoction of perceptions, emotions, and thoughts, Iconic Memory Units are like an easily recalled thought or memory. Illustrative and illusionary, Iconic Memory Units provide signals for the mind, perceptually reducing an idea or an experience—in a phenomenological manner—to a level of "poignant essence." IMU's like thought-patterns and word-images are brought forward to a conscious level through recall. It is because of their iconicity and their repeated use that such experiences are remembered (Allan, 1991).

Conclusions

Imagery reproduced by motion media carry a multi-sensory amalgamation of mental experiences. The blending of these experiences phenomenologically intersect with the reality and perception of words, images, sounds, numerical data, and artistic expression. A-V-V-K imagery produces, in a recall mode, images that become symbolic and sign-bearing in nature.

Scientific and technological improvements in the development and production of motion media may well have exceeded our own capability to perceive, capture, and understand the imagery in our mind's eye.

Virtual reality, interactive computerized multi-media, and other evolving forms of media technology further stretches our mind's ability to perceive and interpret A-V-V-K imagery. The many literacies of A-V-V-K imagery, coupled with motion media's ability to serve, store, and disseminate information, may bring another challenge.

No doubt, our capacity for high-tech violence, excessively repetitive high speed chases, and the boredom of thin, shallow story lines in film and television has been exceeded. Good solid story line structure and better verbal imagery is needed. Aural and visual and kinesthetic imagery can oftentimes be overpowering. A balance is now needed: more in-depth characterizations and portrayals should be expected of the actors/actresses and producers/directors. The viewer-recipient should demand greater intellectual meaning in the content of motion media.

In the not too distant future, other forms of imagery will become popular. In addition to A-V-V-K imagery, the author suggests that the production, encapsulation, and distribution of other sensory forms—smell, touch, taste—and the imagery and perceptions they produce and convey will become common elements in the communication process. This will bring us closer to a more complete communication age, an age of total media and total imagery—an age of perceptually educated people. Some might even say that right-brained mental activity will become better understood and may even come into vogue.

References

Allan, D. W. (1991). *Probing motion media communication: Process, message and the Iconic Phenomena Communication Model.* (Doctoral Dissertation, Union Institute, 1990). Dissertation Abstracts International, 52 (2), 331-A. (University Microfilms International No. DA9119946).

Begg, I. (1983). Imagery instructions and the organization of memory. In J. C. Yuille (Ed.), *Imagery, memory and cognition-Essays in honor of Allan Paivio* (pp. 91-116). Hillsdale, NJ: L. Erlbaum Associates.

Bolles, E. B. (1988). *Remembering and forgetting*. New York: Walker and Company.

Bruner, J. S., Oliver, R. R. & Greenfield, P. M. (1966). *Studies of cognitive growth.* New York: Wiley.

Eisenstein, S. M. (1947). *The Film Sense*. Translated and edited by J. Leyda. New York: Harcourt, Brace & Company.

Jonassen, D. (1984, Fall). The mediation of experience and educational technology: A philosophical analysis. *ECT Journal*, 32(3), 153-167.

Johnson-Laird, P. N. (1983). *Mental Models*. Cambridge, MA: Harvard University Press.

Langer, S. K. (1957). *Philosophy in a new key*. Third edition. Cambridge, MA: Harvard University Press.

Paivio, A. (1971). *Imagery and verbal processes*. New York: Holt, Rinehart & Winston.

Paivio, A. (1975). Coding distinctions and repetition effects in memory. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 9). New York: Academic Press.

Salomon, G. (1979). *Interaction of media, cognition, and learning*. San Francisco: Jossey-Bass Publishers.

Schramm, W. & Pool, de S. (Eds.). (1973). *Handbook of Communication*. Chicago: Rand McNally College Publishing Company.

Winn, W. (1982, Spring). Visualization in learning and instruction, a cognitive approach. *ECT Journal*, 30(1), 3-25.

Yuille, J. C. (Ed.). (1983). *Imagery, memory and cognition: Essays in honor of Allan Paivio*. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.